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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/587,888 | 06/06/2000 | Austen John Britton | 190-1453 | 8111 |

7590

04/18/2003

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| EXAMINER |
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GROSS, KENNETH A

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| ART UNIT | PAPER NUMBER |
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2122

DATE MAILED: 04/18/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------------------|---------------------------------------|--|
| Office Action Summary | Application 09/587,888 | Applicant(s) BRITTON ET AL. | |
| | Examiner Kenneth A Gross | Art Unit 2122 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7,8,13 and 16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7,8,13 and 16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the amendment filed on January 30th, 2003.
2. It is acknowledged that Claims 3-6, 9-12, 14, and 15 are now cancelled.
3. The 35 U.S.C. 102(b) rejections of Claims 1, 2, 7, 8, 13, and 16 are now overturned.

Claims 1, 2, 7, 8, 13, and 16 are now rejected under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 7, 8, 13, and 16 are now rejected under 35 U.S.C. 103(a) as being unpatentable over Access 97 Macro & VBA Handbook by Susann Novalis, 1997 (hereinafter Novalis).

In regard to Claim 1, Novalis teaches the following: (1) defining the database in an entity relationship data model (page 1, lines 1-2); (2) creating a source file containing instructions for processing the database, including high-level directives. Microsoft Access allows a user to create VBA source files that process a database, including macros, which help to process the database (Chapter 5, page 1, lines 1 and lines 9-10). It is the inherent nature of macros to be pre-processed during compilation by replacing the macros with code. The "Microsoft Press Computer Dictionary: Third Edition" defines a macro as "*a name that defines a set of instructions that are*

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substituted for the macro name wherever the name appears in a program when the program is compiled or assembled" (Page 294). Novalis does not explicitly teach pre-processing the source file using information from the data model to generate a destination file. However, macros take arguments just as functions do. The macros that process a database use information regarding the data model that was pulled from the data model itself. For example, a macro that aggregates data in a row of a table will need to know the name of the row, the name of the table, and the name of the database itself. This information must be pulled from the database in some way in order for the user to successfully provide the correct information in the arguments of the macro. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to define a database in an entity-relationship data model and create a source file containing instructions for processing the database, including high level directives, as taught by Novalis, where the source file is pre-processed by replacing directives with code, since this is an inherent step in the processing of macros, and where information from the data model is used to generate a destination file, since information about the data model is obviously provided to the macros, so that the macros can correctly operate on the database. Claims 7, 13, and 16 correlate directly with Claim 1, and are rejected for the same reasons as Claim 1.

In regard to Claim 2, it was shown above that VBA programming in Microsoft Access 97 allows for macros to be used, where macro substitutions are performed on the source file (Chapter 5, page 1, lines 1 and lines 9-10). Claim 8 correlates directly with Claim 2, and is rejected for the same reasons as Claim 2.

Response to Arguments

In response to the 35 U.S.C. 102(b) rejection of Claim 1, the applicant argues that Access 97 does not pre-process a source file containing macros to generate a destination file containing the code for processing the database. However, VBA code does use a compiler to translate the code from source code into a pseudocode. This process is pre-processing of the source file, since the code is processed before it is executed. The applicant further argues that there is no suggestion of pre-processing using information pulled from the database data model. However, information about the data model is essential if the source code is to be created which operates on the data model. Many macros that operate on a database have arguments that include information about the database, as in table and row names, database name, or individual elements within the table.

In response to the 35 U.S.C. 102(b) rejection of Claim 2, the applicant argues that there is no substituting anything for a macro in Access 97. However, it is important to reiterate that the inherent characteristic of a macro is the use of macro names, which get replaced with a sequence of instructions during compilation. While it is true that a macro is a sequence of instructions carried out as a unit, the sequence of instructions can be represented by a macro name in VBA. This macro name gets replaced with a sequence of instructions at compilation time.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Dalal et al. (U.S. Patent Number 5,701,461) teaches accessing a database during compilation time to access table structure data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Gross whose telephone number is (703) 305-0542. The examiner can normally be reached on Mon-Fri 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A Morse can be reached on (703) 308-4789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

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April 8, 2003